American Farmer,

AND SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY

"O Fortunatos nimium sua si bona norint
"Agricolas." . . . . *Virg.*

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☞Importance of Lime to soils—We publish this week Essay No. 2. on the above interesting subject, by D. Lapham, esq. Civil Engineer. Essay No. 1 was published by us some weeks since, and the two will form the most able disquisition we have for a long time presented to our readers. The manner of treating the question under consideration, will commend his papers to the practical farmer, as Mr. Lapham has endeavored, and we think successfully, to render himself *intelligible*, a thing too often neglected by those who assume to be teachers of science. We ask for this and the previous essay, attentive perusal, for they deserve it well.

☞We have to acknowledge a letter from a friend and correspondent, of Washington co. Md., and thanking him for his inquiries and suggestions, beg leave to assure him that we will take an early occasion to answer the one and profit by the other.

Corn and Cob Crusher—The increased enquiry relative to, and demand for, this valuable machine, renders it proper for us to give all the information in our power as to the practical operation of those manufactured in our city. For this purpose we will cheerfully lend our columns to the publication of statements from gentlemen of known respectability and good judgment, (as is that given below) of the value, efficiency and power of their operation. We invite other gentlemen who have purchased machines in this city, to follow the example of our neighbor, Capt. Dungan, and forward us their disinterested testimony, in order that their brother farmers may know what they may reasonably expect to receive in the purchase of one of these machines. We have recently forwarded one of Hussey's to Dr. Gwathmey, of Aylett's, V. another to Hugh Lawson, Esq. Hawkinsville, Geo. and another to A. Hargrave, Esq. [with a Durham and a Devon heifer, &c. via the steamboat to Petersburg, and rail road to Raleigh, which we hope will arrive safe and in good order]—we also learn that Messrs. Sinclair, jr. and Co. have forwarded a number to Hampshire co. and other parts of Virginia, and we have no doubt any of these gentlemen will take pleasure in exhibiting the same to their neighbors.

In publishing the letter of Capt. D. we would only add, that we hope the experience of one so competent to judge of the value of this plan of feeding, will induce others to follow his excellent example, and economise their grain as he has done.

Surry Farm, December 22d, 1841.

Samuel Sands, Esq.—*Dear Sir* :—Some time in November last, I purchased one of Mr. Hussey's Cast Iron Mills, constructed to grind corn and cob together; I am gratified to say, it has more than answered my expectations.

I have ground probably 150 bushels for my horses, and find it to grind sufficiently fine for all purposes of feeding, at about the rate of 8½ to 9 bushels per hour with three horses. It has one peculiar good quality, which I have never seen in any other Mill constructed for the like purpose.

It is well known that the cob contains near the heart or pith, a hard flat substance, which I have never seen made sufficiently fine for horse feed by any other machine, and have always been deterred from purchasing one of these desirable saving machines on that account. The above named machine, grinds all that part sufficiently fine for all purposes of feeding, and in fact as fine as brown stuff or bran.

This machine will save me in grinding at least sixty dollars per annum, without calculating the cost and time of sending to mill. I should almost be afraid to state what I think the saving to a farmer would be by the application of this highly useful machine.

Suppose a farmer feeding in the year 500 bushels corn—we calculate the nutriment from the cob will be one-third of the amount of corn used, which will increase his food for stock, say 166 bushels, making this much entire gain, all of which can be done in the time it would take to shell with a patent corn sheller, the same amount of bushels. In using heretofore chopt corn for horses, I have thought it necessary to purchase brown-stuff and mix therewith, to give a more healthy action to the food. It is generally conceded, that corn fed to horses alone was indigestible; the cob ground with the corn obviates the necessity of purchasing other food as a mixture, and has all the advantages of the above mode of feeding.

I have made an experiment with this machine to grind shelled corn for meal, and am under the impression, with care, one-third could be sifted out sufficiently fine for bread, provided the corn is dry and in good order. If these hasty remarks should be useful to the patentee or the feeder, I shall be much gratified: to Mr. Hussey, whose unwearied industry in constructing labour-saving machines, the farmer owes many and lasting obligations, and I hope his success will be in accordance with his untiring zeal.

I have recently purchased from Mr. Williams in Light street, one of Mott's Patent Boilers; the saving in fuel in this boiler over any other mode that I have seen will be at least one-half. I have not had it sufficient time to test all its good qualities, but from what I have seen of its usefulness, I would recommend every feeder of cattle to procure one. I remain, dear Sir,

Respectfully, yours,
ABEL S. DUNGAN.

Mr. Murray, whose establishment is some distance from town, has left in our charge one of his Crushers, which we will with pleasure exhibit to any gentleman who will call on us for that purpose.

Bed of Marl in Dorchester Co. Md.—We have before us a specimen of Shell Marl, discovered on the farm of Mr. John S. Lafitte, in Dorchester co. Md. The bed from which it is taken, is, we learn, a large one, which will enable the owner, besides supplying his own wants, to furnish it in considerable quantities to others. Professor Ducatel, the state geologist, by whom it has been examined, furnishes the following letter to Mr. Lafitte, by which it will appear, on examining the tabular view in his Report made in 1834, that it contains of carbonate of lime nearly double the quantity, besides pot-ash, found in other beds of marl in Caroline, Talbot and Queen Anne's.

Dear Sir:—I have examined the specimen of Marl left by you at my house, and am gratified to have it in my power to pronounce it of the very best quality. Without subjecting it to an elaborate analysis, which is not required, I find its principal fertilizing ingredient, *carbonate of lime* to amount to 40 per cent. and a small proportion (about 2 p. ct.) *of potash*. With the experience I have acquired, both on the Eastern and Western Shore of Maryland, of the value of this material, I must congratulate you on its discovery upon your farm, especially under the favourable circumstances you mention, and do most earnestly urge you to employ it without delay.

An application of 300 bushels to the acre, turned in with some vegetable matter, would, doubtless, much increase the production of your farm. I do not hesitate to say, that you may safely count, after such an application, upon 10 barrels of corn, or 25 bushels of wheat to the acre, besides having your crops guaranteed against most of the inclemencies of the season.

The presence of this Marl bed on your farm, gives it, in my opinion, an additional value of at least ten thousand dollars.

Respectfully yours,
J. T. DUCATEL.

To John S. Lafitte, Esq, Castle Haven.

Baltimore, Thursday, Dec. 9th, 1841.

We publish the letter of the Professor with unmingled feelings of pleasure, and we join with him in his congratulation of Mr. Lafitte, upon this valuable discovery, as we have not before been apprised of any similar one in Dorchester county, which circumstance, in our opinion, enhances its importance. We hope that Mr. L. will take prompt measures, not only to bring it into active use on his own estate, but to render it available to others.

Keeping of Cows—A writer in the Maine Farmer recommends that farmers should not keep too many cows, and cites a well attested instance in which *two* cows, by having the same quantity of food given them as had been previously given to *four*, had yielded considerably more butter, cheese, &c. than had been before obtained from double the number—that is, that the *two* upon extra feed had prodnced more than *four*. We can believe this statement, and believe with the writer also, that farmers should not keep more cows, or stock of any kind, than they *can keep well*, both as to food and shelter. It should be as much the business of a farmer to grow a full supply of winter provender for his stock, as it is to furnish them with summer pasture; and yet how many there are, who never dream of such a thing as setting a field with clover, or any of the artificial grasses, relying altogether upon the precarious resource of their corn-fields to carry their stock through the winter and early spring months. Nor do many of them pay proper attention to saving the provender from those quarters.

In the spreading of manure the utmost care should be taken to have it evenly done, for without such care the succeeding crop will be unequal in its quality and product, as well as those which may follow it.

From the Western Farmer.

An Essay on the importance of Lime in Soils.—No. 2.

By Darius Lapham, Civil Engineer.

Having, in the former number, attempted to show that lime is an essential constituent in all soils devoted to the cultivation of such plants as are used by man and beasts for food, in consequence of its entering into the composition of such plants, and that all soils destitute of calcareous matter are comparatively barren and unproductive;—I shall, in the present number, offer some further reasons to establish the fact of the importance of lime in improving the fertility of soils, based upon its chemical and mechanical effects when present in the soil.

Every soil capable of producing plants, contains organic substances, either of vegetable or animal origin, or both—but chiefly of vegetable origin. No soil wholly destitute of organic matter can support living vegetation.* It is, therefore, evident that the presence of organic matter in the soil is essential to the production of vegetation. And it is also shown by every day experience, that the constant growth of plants, without the addition of organic matter, by the application of manure, or other means, will sooner or later completely exhaust the soil of its power of sustaining vegetation; and that by the addition of organic substances to the soil, this power is again restored, provided all other essential ingredients be present.

Until very recently, the nature and properties of the organic substances contained in soils, had received but little attention from those engaged in the investigations of agricultural chemistry. Within the last few years, however, the attention of scientific chemists has been especially directed to the examination of the organic substances found in soils, and to the peculiar states in which they should exist in the soil, in order that they may be appropriated by the living plant, to the production of a new vegetable organization.

All organic matters, and especially vegetable substances when deprived of vitality, and exposed to the action of air and moisture, undergo various chemical changes, and they are ultimately converted into a brownish or black mass, that has been honored with a great variety of names, but which chemists have now pretty generally agreed to distinguish by the name of *humus*.

Klaproth first discovered this substance in the gum of an elm, and thence gave it the name of *ulmin*. Berzelius found the same substance in all barks. Braconnet found it in sawdust, starch and sugar; and Sprengel and M Pollydore Boullay found it contained in all soils and manures, and thence called it *humus*, from soil. Berzelius, the celebrated Swedish chemist, continuing his researches upon this substance, considered it identical with apotheme, and abandoned all the previous names it had received, and called it *geine*, (from earth,) or extract of mould. The insoluble portion of geine he called *carbonaceous humus*. In 1832 Berzelius discovered in the waters of Porla spring in Sweden two particular acids, which he named *crenic acid*, from the Greek, *krene* a fountain, and *apocrenic acid*, meaning from the crenic; and upon further examination he discovered that the substance which had received the names of ulmin, humus, geine, apotheme, extract, &c., was identical with the *crenic* and *apocrenic acids* found in the water of Porla spring; so that all the former names may be discarded, retaining only, for the substance formed by the combination of crenic and apocrenic acids and by the decomposition of organic substances, the generic name of *humus*. Professor Hitchcock and Dr. Dana prefer to retain Berzelius' name of geine. Prof. Leibig and others adopt the name of humus.

Considerable discussion is still going on, among scientific men, relative to the nature and properties of humus. It is not surprising, that men should differ in opinion about a substance, which, from its origin, must necessarily assume, during the various stages of its formation, different forms and appearances, as well as different properties; or that it should have received such a variety of names, from as many different experimenters, who were probably describing the same substance under different forms.

Hitherto, the organic matters contained in the soil, has been considered by writers on agricultural chemistry, as the source whence plants chiefly derived their food. In a recent publication on organic chemistry, Prof. Leibig has controverted this opinion. But his conclusions being contrary to the experience of practical agriculturists in all ages, it is difficult for us to yield our credence to his reasoning.

Dr. Samuel L. Dana, of Lowell, Mass., whose original and ingenious investigations on this substance, has produced a new era in the science of agricultural chemistry, defines "geine" to be "all the decomposed organic matter of the soil." It results chiefly from vegetable decomposition; animal substances produce a similar compound containing azote. Geine exists in two states—soluble and insoluble; soluble both in water and in alkali, in alcohol and in acids; soluble geine is the food of plants. Insoluble geine becomes food by air and moisure. Air converts soluble geine into solid geine, which is still partially doluble in water, wholly soluble in alkali. Insoluble geine is the result of the decomposition of solid geine; but this insoluble geine, by the long continued action of air and moisture, is again so altered as to become soluble. It is speedily converted, by *the action of lime*, into soluble geine. Soluble geine acts neither as an acid nor alkali. *It is converted into a substance having acid properties by the action of alkali*, and in this state combines with earths, alkalies, and oxydes, forming neutral salts, which may be termed *geates*. These are all more soluble in water than solid geine; especially when they are first formed. Their solubility in cold water is as follows: beginning with the easiest, magnesia—lime—manganese—per-oxyde of iron—alumina—baryta. The geates of the alkaline earths are decomposed by carbonate alkali. The geates of alumnia and of metallic oxydes, are soluble in caustic or carbonated alkali without decomposition. The geates of the alkaline earths by the action of the carbonic acid of the air, become *supergeates*, always more soluble than neutral salts.

By the action of growing plants upon silicates contained in the soil, the potash and other bases are set free, and combining with geine, renders it soluble and fit for the food of plants. Air and moisture, are, however, considered by Dr. Dana, as the principal solvents of geine, which will finally be wholly dissipated in air, leaving only the inorganic bases of the plants with which it was combined. The action of the oxygen of the air unites with the hydrogen of the geine and forms *water*, which in its turn again dissolves more geine.

Dr. Dana is of opinion that geine is a definite proximate principle, whose separate, independent existence, whose properties, combinations, and uses, are as well established as any facts in chemistry, and he believes that geine existed before organic matter; that it was an original formation, dating its birth from the dawning of time, when oxygen, and hydrogen, and carbon were created.

Professor Leibig in his recent work on Organic Chemistry, defines humus to be "woody fibre in a state of decay," and says: The opinion that the substance called humus is extracted from the soil by the roots of plants, and that the carbon entering into its composition, serves, in some form or other, to nourish their tissues, is so general, and so firmly established, that hitherto any new argument in its favor has been considered unnecessary; the obvious difference in the growth of plants, according to the known abundance or scarcity of humus in the soil, seemed to afford incontestible proof of its correctness. Yet this position, when submitted to strict examination, is found to be untenable, and it becomes evident from most conclusive proofs that humus in the form in which it exists in the soil does not yield the smallest nourishment to plants. (Leibig's Organic Chem., p. 61.) On page 69, Leibig states that "it is universally admitted that humus arises from the decay of plants. No primitive humus, therefore can have existed, for plants must have preceded humus."

The following is Leibig's view of the action of humus in the nutrition of plants. Humus acts in the same manner in a soil permeable to air, as in the air itself: it is a continued source of carbonic acid, which it emits very slowly. An atmosphere of carbonic acid, formed at the expense of the oxygen of the air, surrounds every particle of decaying humus. The cultivation of land, by tilling and loosening the soil causes a free and unobstructed access of air. An atmosphere of carbonic acid is therefore contained in every fertile soil, and is the first and most important food for the young plants which grow in it. The roots perform the functions of the leaves from the first moment of their formation; they extract from the soil their proper nutriment, namely, the carbonic acid generated by the humus.

When kept in a dry place, humus may be preserved for centuries, but when moistened with water, it converts the surrounding oxygen into carbonic acid. As soon as the action of the air ceases, that is, as soon as it is deprived of oxygen, the humus suffers no further change. Its decay proceeds only when plants grow in the soil containing it; for they absorb by their roots the carbonic acid as it is formed. The soil receives again from living plants the carbonaceous matter it thus loses. So that the proportion of humus in it does not decrease. (Leibig p. 170.)

It is the greatest possible mistake to suppose that the temporary diminution of fertility in a soil is owing to the loss of humus; it is the mere consequence of the exhaustion of the alkalies. (Leibig p. 196.)

Dr. Charles T. Jackson, in his investigations connected with the geological survey of Rhode Island, has made extensive and valuable researches and observations on the substance of humus; and as his labors are of more recent data, than those of Dana or Leibig, and differ from them in some essential particulars, I shall quote his views somewhat at large.

Much confusion appears to exist as to the nature and names of the organic matters contained in soils, and it is probable that in the several stages of decomposition of different substances, a variety of changeable compounds are produced that have not yet been fully examined.

During the last year, (1839,) I have endeavored to ascertain the nature of the extractive matters obtainable from humus of soils and from peat, and have ascertained that the principal mass of those substances, to which the names of humus, geine, and apotheme have been applied, is a compound of the crenic and apocrenic acids, which are in part combined with bases, such as the per-oxyde of iron, manganese, lime and magnesia. The soluble extract of humus is mostly composed of crenic acid, sometimes combined with lime and per-oxyde of iron.

After the discovery of these acids in the soils and peats of Maine, Massachusetts, and Rhode Island, I had the curiosity to examine the soils from the continents of Asia, Africa, and those from the West Indies, and from the Western states of this country. In all of them I have discovered crenates, and apocrenates. I have also detected the crenic acid in various waters from lakes, rivers, and wells, so that there can be no doubt of its being generally present in arable soils.

Crenate of lime is soluble in water, and is, without doubt, an active agent in the nourishment of plants. Apocrenate of lime is more difficult of solution, but is slowly taken up and colors the water yellow. It is sufficiently soluble to supply the rootlets of plants. All the alkalies, both fixed and volatile, dissolve crenic and apocrenic acids; ashes, the alkalies, potash and soda, carbonate of ammonia, and even the alkaline earths, render the inert crenates, and apocrenates, in the soil, soluble and active, while the acids and alkalies neutralize each other, and render the soil more fertile.

Many of the lake waters around Boston contain the crenic acid, either separate or in combination with lime, manganese, or iron. It is found in the water of most of the wells in the city, and I doubt not is universal.

Any chemist can foresee some of the consequences that may be deduced from the above data, and that by chemical means we can bring these new combinations to bear upon the art of agriculture. If the per-oxyde of iron in a soil is really in combination with crenic and apocrenic acids, then we can understand why the land is improved by means of an application of ashes and lime, which will dissolve the vegetable acids, and render them convertible into food of plants. Carbonate of ammonia, which is known as one of the most powerful stimulants, as it is improperly called, is capable of dissolving these new acids, and will take them from lime, iron, manganese, and magnesia. Hence, the value of animal manures, which generate ammonia, will be understood.*

From all that has been said and written about humus, geine, apotheme, ulmin, ulmic acid, humic acid, crenic and apocrenic acids, &c., we may conclude, that all soils contain organic matters; and that these may exist in the soil, in all stages of decomposition, from the fresh and perfect vegetable and animal substance, down to the complete extinction of all organic structure; and that during the progress of this process of disorganization, a part of

* The few cases in which plants have been forced to vegetate in charcoal, are not considered exceptions to this remark, as they require to be watered abundantly with rain water, which contains organic matter.

* Geological Report of Rhode Island.

the organic matters are disengaged or set free from their original combinations in the form of gaseous, saline, and earthy matters, which are left in a condition to enter into other combinations, and form new compounds, or be dissipated in the air, or absorbed and mixed with the soil, or they may be taken up by the roots of living plants and form a new vegetable structure.

When the process of the disorganization of organic matter has proceeded to a certain extent, the residue of the mass, that has not been dissipated in the form of gas, or separated in the form of saline and earthy substances, assumes a fixed and determinate character, and no further decomposition or transformation occurs; and if it be not exposed to the air and moisture, will remain unaltered for ages, until it is again exposed to the action of air and moisture, or to the action of the alkalies or alkaline earths. It is this substance which is called humus. Dr. Dana considers it a "definite proximate principle," and Dr. Jackson has discovered that it consists of two new acids. Both, however, agree that the action of alkalies and alkaline earths will render it soluble and fit for the food of plants, whether it be called "geine," "apocrenic and crenic acids," or humus." It is therefore of but little importance to the practical farmer by what name the substances is called, provided he has a clear conception of the substance itself, and a knowledge of the manner of converting it into food for his plants.

Ashes, which contain potash and lime, act upon the humus to render it soluble. *Ammonia*, contained in animal manure and urine, as well as in snow and rain-water, acts upon humus to render it soluble. Carbonate of ammonia has a greater affinity for humus than lime, iron, manganese, or magnesia. *Gypsum*, by being decomposed in the soil by the carbonate of ammonia contained in the rain-water, form sulphate of ammonia and carbonate of lime, both of which act upon the humus of the soil and convert it into the food of plants.

Lime is considered by both Drs. Dana and Jackson, to be the chief solvent of the "geine" of the first, and the "crenic and apocrenic acids" of the latter gentleman. There are, however, various other acids existing in a free state in the soils, which have the effect to arrest the conversion of woody fibre into humus, and consequently prevents it from becoming the food of plants, until lime has been applied to neutralize these acids and allow the process of the formation of humus to proceed. Peat is a remarkable instance of this kind. The vegetable substances, by the action of acids, is prevented from becoming converted into humus, until neutralized by lime, and peat then forms one of the best compost manures a farmer can have.

The chief and most important advantages to be derived by the farmer in the application of lime to the soil, consists in applying it in contact with fresh vegetable and animal substances either in a compost heap, or by ploughing them into the soil. By this method we obtain the benefit of the action of the lime upon the fresh vegetable fibre, to convert it into a state of fermentation, in which an abundance of carbonic acid is produced, and if animal manures be used, ammoniacal gas is likewise formed, both of which will be absorbed and retained in the soil by the lime, but which would otherwise escape into the air and be lost, before the vegetables intended to be grown upon the land could be sufficiently advanced to appropriate these gases as food. The remaining portion of the manure and vegetable fibre would still pass into the state of humus, and the lime in its form of a carbonate will proceed to dissolve the original humus contained in the soil, as well as that newly formed; and should any free acids be present in the soil, which will frequently be the case when fresh vegetable substances are ploughed into the soil, the lime combines with such acids, and yields the carbonic acid, to the roots of plants.

Air and *moisture* will convert a portion of humus into a state in which it is easily soluble in water. *Lime* speedily converts the remaining portion which is of difficult solution, into a soluble state, *Alkalies* converts it into a state in which it has acid properties, and in that state it will readily combine with earths, alkalies, and oxydes, forming neutral salts, which are readily soluble in cold water, and these salts are, by the action of carbonic acid, rendered still more soluble. *Growing plants* acting upon the silicates contained in the soil, set free the potash and other bases, which act upon the humus and convert it into food of plants. *The oxygen of the air* acting upon humus produces carbonic acid, which forms a large portion of the food of plants. And likewise the oxygen of the air unites with the hydrogen of the humus and forms *water*, which again dissolves more humus.

From the Farmer's Cabinet.

Utility of Shell Marl.

Mr. Editor,—At your request, when in our little State a few days ago, I send you a short statement of the effects of this invaluable manure. The shell-marl, which is found in New-Castle county, State of Delaware, has been discovered on a few farms along the eastern limit of the Chesapeake and Delaware canal only, or that part of the canal which has defaced a part of the original St. George's creek. It is generally found at the head of little streams making into this creek, which is the dividing line between Red Lion and St. George's hundreds. Marl has been discovered in both hundreds, but much the largest quantity had been found and used in the former hundred, although it has only been a few years since there has been any general use made of it. In the spring of 1837, I came into possession of a farm, now known by the name of *Marl Farm*, about three miles west of where I reside. The soil, at that time, was in an extreme state of poverty —reduced to that degree by successive cropping and hard tillage, through a long term of years, without the application of any kind of manure; in fact, the whole farm was so poor, that the crops obtained from it would not pay the cost of tillage. From four to six bushels of corn per acre on an average, was as much as it would produce; of wheat you could not raise as much as you sowed; red clover would scarcely sprout, and grow it would not. Now, the question may be asked, how came I to purchase a farm so extremely poor? A large bed of this shell-marl had been discovered on it, three or four years previous to the time that I came into possession, but it had been sparingly made use of; some two or three acres only having been covered with it, for an experiment, at the time when the discovery was made.—Thus the improvement by the marl, progressed no farther, until I came into possession. But the effects of the above experiment were sufficient to satisfy an inquiring mind, of the vast importance of this new manure for enriching the soil. To till this farm in its extreme poor state, I well knew would not pay expenses; I concluded, therefore, that the first thing to be done, would be to marl it over, and then go to cropping. Accordingly, I hired a man for the season, furnished him with a cart and two yoke of oxen, and made it his business to do nothing but cart marl, until I had covered the whole place over, at the rate of from six to eight hundred bushels per acre. What I would get covered over 1 year, I put in corn the next; and would obtain about twenty bushels per acre. The corn-ground was followed the next spring with oats and clover-seed; the oats were better in proportion than the corn—the effects of the marl beginning to be greater; while the effects on the grass were still plainer;—and wherever the red clover was not regularly sown, (for in some places the seed did not meet,) in all such places the land would be coated thickly with white clover. We had been once over the place with marling and tilling, as I have mentioned, and last winter I commenced marling it over with second dressing, on a clover sod, at the rate of three hundred and fifty bushels per acre. The land I had in corn this year, was a clover sod with the second coat of marl. This piece of ground was the very poorest of the farm, in the first instance; but the result is, (for we have just finished husking it,) from forty to forty-six bushels of corn per acre, and that too, of as good and sound a quality as any of our best land in the neighbourhood, such as has been under a high state of improvement for the last twelve years, with stone-lime and barn-yard manure. In order that I might come to some accuracy as to the quantity of corn, I measured one acre, and measured the corn also—the result was, forty-six bushels; other acres could have been selected which would have gone to fifty bushels, and probably more.

The second year after I commenced farming where I now reside, I made an experiment, by top-dressing with marl the yard in front of my house, which was at that time a clover sod. The result is surprisingly great; so that I challenge a competition with any other kind of manure of equal expense. It is now about five years and six months since the marl was put on; the yard was all marled over except about thirty feet square; on the part which was marled, the clover thickened up, and the green grass soon began to make its appearance; and at this time it is quite thick-set with green grass. The part which was not marled has no green grass, and the quantity of clover has decreased; there is at least four times the quantity of grass on one than on the other. The marl for the yard was brought from my marl-farm, about three miles distant; but, about three years ago, and after much research, I discovered marl on my farm where I now reside. My observations from its effects, prove it equal to the first marl. A part of a field which I mowed the present year, was marled two years ago last spring—this balance of the field being covered over with barn-yard manure, at the same time. The whole field was then put in corn, and the next spring sowed with oats and clover-seed, and this year it was mown: the difference in the grass in favour of the marl over the manure, was in the ratio of three to one. This appears large, but if it should be doubted, I can produce testimony to confirm all I say; or I will here give a cordial invitation to any person to come and see for themselves. I could say much more about the effects of this species of manure, by noting the results of various experiments, made by many of my neighbours, who have been making free use of it.

Thus, you will perceive, that this land on the marl-farm has been redeemed from an extreme state of poverty; and with no other kind of manure than the shell-marl, has been brought to produce forty-six bushels of corn per acre, in the short space of four years. Now, I do not intend to let it rest at this: the marl must go on the land faster than ever, and my course in future will be, to top-dress heavily on young clover; and I see nothing to prevent me from bringing this land up to yield the largest of crops, so soon as I can get it covered over with the third and fourth dressings; and this I do not intend shall be a very distant day. One great and important quality in the character of this marl is, that the *first* dressing will not be done giving out its strength or renovation to the soil, under six or eight years, while every subsequent dressing will have the same effect; and when the land is once made rich by it, it will remain stationary at that degree for twenty years. I consider the marl on this farm almost as convenient to it as the manure made in the cattle-yard, for we can drive the team into the pit, and load half the marl from the bank, without previously excavating it.

I have here only spoken of the value of our inexhaustible resources for manure—of the other and many advantages which nature has blessed our section of country with, I need say nothing, as you have favoured us with a visit, and have seen for yourself. But I would take the opportunity to say to your correspondent, G. M., who says in the last number of your valuable paper, that he is somewhat desirous of quitting the mercantile business, and becoming a farmer, before he purchases elsewhere, I wish him to come and see this part of Delaware; we have plenty of room, and should he deem it advisable to visit our neighbourhood, what feeble information I can give him, he shall be welcome to. Yours, respectfully,

PHILIP REYBOLD, Jr.

Fair Mount Farm, near St. George's.—Nov. 30, 1841.

At a late meeting of the South Carolina Agricultural Society the President read the following communication from Colonel Wade Hampton, which was ordered to be entered on the minutes:

Columbia, Nov. 24, 1841.

Dear Sir:—The meeting of the State Agricultural Society affording a favorable opportunity for its distribution, I beg leave to place at your disposal, for that purpose, about two bushels of Musquite grass seed. This grass is a native of Texas, and as far as I am capable of forming an opinion by an experiment of a single year, is admirably adapted to our country. It has, I understand, been successfully cultivated by Mr. Carter of Alabama, for some years past, and the high estimate he placed on it, induced him very kindly to send me a few quarts of seed in the summer of 1840. These seed were planted in September following, in drills, came up with great regularity, and continued to vegetate during the whole winter. A drought of unusual duration in the spring, and another in July, accompanied by intense heat, produced no visible effect on it, and it has continued to flourish through all the vicissitudes of a most disastrous season. The seed were sown on dry alluvial soil, which had been prepared for turnips; and from a piece of ground not exceeding the fourth of an acre, I gathered fourteen bushels of seed. It will, I think, make fine hay, growing from two and a half to three feet high; and in its native prairies it forms the favorite pasture of the wild horses and buffalo.

Appreciating as I do, your uniting exertions in the great cause of agriculture, I offer no apology for the trouble I impose on you, in distributing the seed that accompanies this letter.

Very respectfully, your obedient serv't,

W. Hampton.

BURNT CLAY—As there may be parts of our country where neither lime, marl nor ashes are easy of procurement, we would suggest that *burnt clay* would form a *tolerable substitute*, and having thus intimated, it may not be amiss to point out a practicable plan, by which that may be prepared. But before we attempt to describe the plan of clay burning, we deem it proper to remark, that in intrinsic value, there is no comparison between ashes produced thus, and wood ashes, marl, or lime, and only offer the former as an alternative, where neither the latter can be cured. Under the head of "*Earthy Manures*," Sir John Sinclair, observes—"It is well known, that burning clay is an *old* practice, which at various periods, has been pursued with energy and success, and at other times has fallen into neglect. The oldest book in England in which it is mentioned, is, '*The Country Gentleman's Companion*,' by Stephen Switzer. In that work it is stated, that "the Earl of Halifax was the inventor of this useful mode of improvement, and that it was much practiced in Sussex." * * * Again he says, "It is said to have been ascertained that lands, reduced by tillage to poverty, would produce an excellent crop of *turnips*, if the ground were ploughed two or three times, and clay ashes spread over it."

So much for the remarks of Sir John Sinclair, and we will now state how the operation of burning clay is to be performed.

In the first place, the land is to be ploughed with a paring plough, or skimmer, to the depth of four or five inches, and by cross-ploughing sub-divided into squares of convenient size to handle. These must be turned up to dry, and when dry may be burnt either with *wood* or *lime*. If the former should be used, the sods of clay must be piled up to the height of a foot or a half, so as to form alleys, to admit a current of air from the different points of the compass. These alleys must be filled with wood and brush, which must be dry and combustible; then arch over the alleys with the cut sod, and build on the top of the whole, until the pile is about three feet high. The dimensions of the pile to be burnt, should be about five or six yards long and half that breadth. Kindle the fire, and as the sods are reduced to ashes, add more sods to the burning mass, until you have raised a mound of six or seven feet in height. When the mass shall be well on fire, the flame must be kept confined by heaping on more sods whenever it bursts out. By making the small piles we recommend, much of the labor of spreading and transportation of the ashes will be thereby saved.

If *lime* should be used to burn the sod, the following method is recommended by Mr. Curwen, an English agriculturist of distinction. To burn a mound seven yards long and three and a half wide, he uses 72 bushels of *unslaked lime*. He first spreads the dry sods to the required length and breadth: on these he spreads a covering of lime, say one-half the quantity named above: over this spread a layer of dry sods of about 8 inches depth: on this spread the other half of the lime, and increase your pile to the height of three feet with dry sods. In about 24 hours this body will take fire by involuntary combustion, and as the blaze reaches the top, fresh sods must be added, and when the ignited ashes abound, let the clay be added from time to time until your heap is sufficiently large for distribution, when you may spread them, and begin another mound as before directed.

Mr. Curwen, in speaking of its good effects, observes, "that the general adoption of the system of surface and soil clay-burning is likely to be the most important discovery for the interests of agriculture, that has occurred since the introduction of the turnip into Norfolk, England, by Lord Townsend."

And the author of a most excellent work, entitled "The New Farmer's Calendar, published in London, who estimates the expense at about one pound, per acre, in England—in commendation of the plan, says:

"Thus is finished this most beneficial operation, which at a stroke, as it were, effects more than could be achieved in many laborious and expensive seasons. The soil is purified and its natural fertility revived, by that grand destroyer and restorer of all things, *fire*. The tough, untractable hide-bound surface, with its mossy and sedgy herbage, the innumerable roots of rubbish, the hosts of insects and vermin, with their eggs, within the soil, before such unconquerable obstacles to fertility, are now suddenly changed into its most certain medium, that of a rich manure, and the earth left clean, friable and level, fit for every purpose of agriculture, to which its nature may incline."

Both authors recommend that the ashes be spread as soon after being burned as possible, to prevent being deteriorated. Having mentioned that the expense of paring and burning, in England, is estimated at about one pound per acre, it is but fair to state, that its cost here, owing to the higher price of labor, would be more; but if the resulting good would bear any proportion to the representation, the burning of clay, in districts where lime, marl or ashes cannot be procured, strikes us as being an object worthy of consideration, and that stubble fields are the appropriate ones for experiments. We will close this article with the remark, that ploughs adapted to paring may be obtained in most of the large agricultural implement establishments in this country.

COMPOST MANURES—Having spoken in our last of the policy of accumulating manures through the medium of compost heaps, we deem it due to such of our readers as may not be experienced in the matter, to lay down some general rules for their government, with respect to the relative proportions of the several ingredients entering into their composition. In doing this, we do not wish to be understood as desiring, in the least, to shackle the judgment of any, but merely desiring what we may say, to be received as mere suggestions, as it is utterly impossible, without an intimate knowledge of every locality, for any one however well versed in the business, to say what would be the best materials for each field. Therefore, in saying what we may, the intelligent reader will be the judge of its propriety and adaptation to his own peculiar case. Having made this disclaimer, we may be permitted to urge as an indisputable proposition upon all—that, by proper painstaking in the collection of materials for compost heaps, and a judicious mixture and management of them, a farmer's interest would be promoted.

With this exposition of our views and intentions, we will state what materials and quantities should enter into compost for a

CLAY SOIL.

Let light mould and leaves be hauled from the woods, so as to form a bed of any given size, 12 inches deep; on this place, to the same depth, stable or barn-yard manure; on that, to the same depth, marsh mud, or any similar substance; spread over this last body, in the proportion of two bushels of lime, or four of ashes, to every double cart-load, of the preceding materials. This done, add layers of the above materials, in the proportions before prescribed, until your mound is as high as it can be conveniently managed, always taking care to spread each evenly over the entire surface, and being particular to distribute the lime or ashes over all parts of the body on which it may be immediately superincumbent. Should you not have either lime, or ashes at command, but have marl, then spread that on in its stead, making the quantity used equal to that of the other layers. Should the clay, on which you purpose to put your compost, be very stiff and adhesive, a layer of *sand* may, with decided advantage be added to the other substances. The sweepings of the wood-yard, sweepings of that of the barn and dwelling, together with the soap-suds of the laundry, should be thrown on your compost heaps as they are being made.

If made in warm weather fermentation may have sufficiently advanced, in two weeks, in the compost bank, to require attention to prevent injury. By inserting a stick and withdrawing it after a few minutes, you can ascertain, by feeling the stick, whether any thing should be done. If the stick is of blood heat, then you must either shovel over the bank, or water it; either of which will arrest the process of fermentation for the time. If time will allow you to do so, the first plan would be best, as it would enable you, in the operation of shoveling, to intimately mix the various constituents of the heap; but if not convenient, watering will answer. Such bodies of compost should be examined at least once every two or three weeks, so as to prevent the fermentation being carried on too rapidly. At the expiration of five or six weeks after the heap is formed, it should be turned over and the various bodies be well mixed together. After this latter operation shall have been performed, if the heap were well watered with brine, it would greatly tend to improve the quality of the manure.

In making composts for

SANDY SOILS,

A very large portion of the *heap* should be *clay*, and with this exception, its component parts should be the same as the one above; to be treated in the same manner. Were we composting for a sandy field, we should put fully 50 per cent. of clay into the compound, as besides being thereby able to impart more tenacity to it, we should calculate on giving it the capacity, not only of absorbing, but of retaining a much larger quantity of moisture. Indeed, lime and clay alone, would make a most admirable *artificial marl*, and confer upon sandy soils much more lasting benefit than any dressing of barn-yard, or stable manure, which could be given it.

We have apportioned the lime and ashes in the compost heaps, so that in the manuring of the ground, each acre may receive 40 bushels of the first, or 80 of the latter, calculating that 20 double-horse cart loads of the compost will be given to that quantity of land. With a dressing in quantity and quality, agreeably to our prescription, we do not hesitate to say, that it would be found to answer better than an equal quantity of stable or barn-yard manure. We say *better*, because we *believe* that its action upon the first crop would be equal, and *know*, that it would last thrice as long, and hence its superiority.

SOLON ROBINSON IN BALTIMORE.

We make the following extracts from the letter of this distinguished advocate of the agricultural interest, to the Albany Cultivator, giving an account of his tour throughout the United States:

From Washington to Baltimore, along the line of the rail-road, the land is mostly miserably poor and uncultivated. It is surprising to see what a mass of human beings daily pass over this road. If half of our agricultural population pursued their calling with the earnestness that multitudes of men and women seem to pursue some ignus fatuus over the stage route, rail-road and steam-boat route, they would accomplish wonders.

It was a lovely pleasant day that I arrived in this busy city, celebrated for its monuments and pretty women. The thriving appearance of Baltimore, indicates a thriving state of agriculture in the vicinity. Among the ornaments of the place I cannot omit to mention the beautiful and romantic resting-place for the dead, which I had an opportunity of visiting during a ride with Robert Sinclair, Jr., out to the nursery of his father at Clairmont, at which place I found *improvement* strongly developed. I also found a hearty welcome, and all the "trimmings," to make my visit interesting. Besides his flourishing nursery business, Mr. S. has a very snug cocoonery, which he finds quite profitable. Having made free use of lime upon his worms this season, he has found them quite healthy. Mr. Sinclair, Jr. has in the city one of the most extensive agricultural ware-houses, perhaps in the U. S. A large part of the implements that he sells are manufactured under the same roof and in such a manner that he can warrant them good. From the polite attention bestowed upon me, a stranger, I am warranted in the con

clusion that my agricultural friends who have occasion to send orders to this establishment for any kind of implements or seeds, will be done by as they would be done unto.

I also visited Mr. Hussey's manufactory of his celebrated and valuable reaping machine. This machine is beyond doubt a very useful implement for the farmer, particularly upon very smooth land, such, for instance, as the western prairies. There is, however, in the west a new harvesting machine that bids fair to do away with machines for reaping. It is a machine that actually gathers the grain out of the standing grain, as clean as it can be thrashed by a machine, leaving the straw standing in the field. I had seen the model of the machine in Chicago last spring, and most unexpectedly to-day I met with my friend Wright, editor of the Chicago Agriculturist, who informed me that the machine has been completed and used during the late harvest, and that it operates to perfection—with three horses, gathering from 10 to 15 acres of wheat a day.

Baltimore also boasts of another lately-invented machine, that appears to me to be one that will prove of immense advantage to the community. This is "Page's Saw Mill." The saw is a circular one, and it may be driven by horse or any other power, and is so portable that a mill large enough to saw a log two feet through and twelve feet long, with all the apparatus can be put into a two horse wagon, and taken into the woods and with the assistance of two men, set up and set to work in less than two days, with the power of the two horses. I dare not say how much lumber *it will* cut per day, but think that you will be satisfied with a thousand feet, although the patentee would not be. In fact, no invention has met my eye that seems better calculated to be useful to the agricultural community than Page's portable saw mill.

Here as elsewhere wherever I go, I find an earnest spirit pervading all the friends of agricultural improvement, that speaks in cheering tones that our cause is in the ascendant.

To-morrow morning I shall again roll along toward new scenes, some of which I hope will prove sufficiently interesting to induce me again to communicate with you Till then, accept the good wishes of

SOLON ROBINSON.

WHITNEY'S COTTON GIN seems likely to be superseded by a new machine for cleansing cotton and wool, which appears to have been introduced with success at Lowell, Mass. The Courier of that place gives the following account of it:

The machine has been invented and patented by W. W. Calvert of Chelmsford, and Alanson Crane, of this city. It consists of a common feed-apron from which the cotton passes through the rollers and thence taken by a common picker and thrown into comb-teeth arranged on a solid iron cylender, and thence is taken forward under a revolving floated wheel guard.—The fibres of cotton are then doffed from the comb-teeth by revolving brushes, and turned out freed from all foreign substances. The secret of the success of this machine in cleansing cotton, lies in the ingenious arrangement of the floated wheel guard in connection with the comb teeth.

The advantages of this machine over Whitney's cotton gin, may be easily seen. The latter has been in use successfully ever since its invention, but does not leave the cotton perfectly clean and injures the staple in some degree. With this machine, there is no chance for foreign substances to pass through; and the operation of it shows that the cotton is much better cleansed by it and with far less injury to the staple. Even cotton waste, no matter how much dirt it contains, may be perfectly cleaned and rendered fit for use.

The inventors have already taken out patents for their machine in Scotland, England and her colonies. One of the inventors is now in Europe, with two of the machines, which are now probably in operation at Leeds or Manchester. This machine will thus be brought to the notice of manufacturers in Europe, and if they examine into its operation, they cannot but feel satisfied that it is for their interest to adopt it. It is intended to take the place of Whitney's cotton gin, which has gained the inventor so much fame and been so useful to the world, and with all the marked advantages it possesses over that machine it must necessarily do so. From its operation, every one must feel satisfied that it is a far better machine than Whitney's.

The new machine has been in operation at the mill of the Lowell Co. for six months, and has been perfectly successful. From rough estimates, it has been ascertained that a three foot machine of this description, will gin from one thousand to fifteen hundred pounds of cotton per day, leaving the cotton quite clean, and without any injury to the staple. It has been used also for cleaning wool of burrs and other foreign substances, and has operated with perfect success.

CREAM POT BREED OF NEAT CATTLE.

Bred by Col. Samuel Jaques, at the Ten Hills Stock Farm, in Charlestown, near Boston.

Col. S. Jaques has offered most of his stock of neat cattle at public auction, on Tuesday, the 11th day of January, next, and the importance of the sale demands a passing notice at our hands.

Mr. J. is well known as an experienced and scientific breeder of animals. Forty years of his life has been principally devoted to the patriotic endeavor of improving the breed of neat cattle of New England. How far he has succeeded in this object, those acquainted with his breed of animals can tell. We shall in this article quote from his catalogue to show the manner in which the *Cream Pot* stock was obtained, and leave it to other and better judges to decide whether it is a breed calculated for New England Farmers.

Stock Breeding in this section of our country deserves particular attention. It is important for farmers to raise animals that will fatten the easiest and with the least expense, regard being had to their milking properties.

The foundation of the Cream Pot breed is as follows: Coelebs, a splendid imported bull, in the possession of Col. S Jaques, a thorough-bred animal of the Durham Short Horn species, was celebrated by the best judges of stock for his progeny. It has been remarked that the cows by Coelebs have proved for deepness and richness of milk, superior to those from any other bull known in this country. The celebrity and acknowledged good qualities of Coelebs, induced Col. Jaques to make the attempt to found a New England breed of cattle, which would unite all the good properties of the most improved stock from the old country, and at the same time be better adapted to our New England climate. After careful inquiry he was fortunate in procuring the cow Groton. The history of this cow is as follows: She was purchased by Ralph Haskins, Esq. of Mr. Hall of Groton. The owner knew nothing of her origin. She had no leading points of any particular foreign breed. Her color was a deep red. She was of medium size, of good form for a native, and *silky* and *elastic*, or, excellent in the *handle* or *touch*; and distinguished for the quality and extraordinary richness of her milk. Coelebs being crossed with this Cow, their first progeny was a Heifer calf; the next was a Bull calf. The Heifer, when at maturity, proved so superior an animal, particularly for the quantity and rich quality of her milk, having given 21 quarts of milk per day, and her cream having produced at the rate of 21 lbs. butter per week, (and this on grass feed only,) induced Mr. Jaques to adopt the name of CREAM POT, as a family name, for this breed of cattle.

The original cow of the Cream Pot breed is offered for sale in the catalogue under the following name:—Cream Pot Cow. Red, calved April 28, 1825, d. Groton by Coelebs, (No. 1.)

After the Cream Pot Cow, Coelebs got the Cream Pot Bull out of the Groton Cow; this is Cream Pot Bull, (No. 2.) Then we have Don Cream Pot, (No. 3.) This bull is red, calved Dec. 20, 1834. Got by Cream Pot, No. 2, dam, the Cream Pot Cow, grand dam, the Groton Cow, by Coelebs, No. 1. Don is probably one of the most valuable bulls ever offered for sale. His color a deep glossy red; his form, constitution, temper, vigor and activity, are all that can be wished. And what is of the utmost importance, he transmits these proprties to his descendants. He weighs 2000 pounds.

From this beginning has sprung Col. Jaques' valuable breed of cattle. It has been noticed with much favor by the most eminent breeders in England, and no doubt exists that it is the best breed for milking properties that can be found in our country.

Col. Jaques deserves especial praise for his laudable exertions in improving our stock. He is the first, we believe, that has attempted to keep a herd book and established a breed of animals. The time will come when a herd book will be an indispensable in every farmer's library.

We quote the concluding paragraph from this catalogue:—

In selecting and breeding these animals, great care and attention were requisite; but not one in a thousand of our *native* cows combine and transmit, as breeders, the properties most desired for the DAIRY, the Shambles, the Yoke, &c. But Mr. Jaques, by adhering to the principles, that *like* produces *like*, that the strongest strains of blood must predominate, and that the good, or bad properties, whether of color, or character, are transmissible, with long experience, close observation, and a judicious exercise of the *eye* and *hand*, has been enabled to rear a race of animals, combining, in a great degree, all these properties. Animals, which are pronounced by the best judges in this country, equal, if not superior to any known. Mr. Henry Colman, Commissioner for the Agricultural Survey of the State of Massachusetts, in his 2d Report, pp. 64 to 70, gives some further account of this Stock. But for a more full pedigree, reference can be had to the Herd Book, kept by Mr. Jaques.

We regret that our limits will not permit us to copy the catalogue entire. The pedigree of every animal is copied from Mr. J's herd book, and would fill a large space. Sixteen bulls and thirty-three cows and heifers are offered at this sale.

In addition to the stock, of neat cattle, will be sold at the same time, about twenty pure South Down rams and ewes. The original of this Stock was selected in England with great care. They are probably better adapted for all useful purposes to this country, than any other sheep ever introduced.

This sale we consider important, and would recommend farmers to attend it, and supply themselves with a superior milking stock of animals.

Catalogues can be obtained at this office.—*Yankee Far.*

THE PROPER AGE FOR BREEDING.—"The proper age at which the process of breeding may be commenced will depend upon circumstances. Even with the early maturity of the short-horns, if the heifers, could be suffered to run until they were two and a half, or three years, they would become larger, finer, and more valuable; and their progeny would be larger and stronger. But the expense of keeping for so long a time is a question that must be taken into serious consideration.

"The custom, which at one period was beginning to be so permanent in the breeding districts of putting the heifer to the male at three year old, or even at an earlier period, cannot be too much reprobated. At the time when they are most rapidly growing themselves, a sufficient quantity of nutriment cannot be devoted to the full developement of the fœtus, and both the mother and the calf must evidently suffer.

"From two to two and a half years old, according to the quality of the pasture, will be the most advantageous time for putting the heifer to the bull. In fair pasture the heifer will probably have attained sufficient size in two years. If the period is prolonged after three years, and especially with good keep, the animal will often be in too high condition, and there will be much uncertainty as to her becoming pregnant; though, in general, putting on more scanty subsistence for a short time will set all right. At an early age there will often be danger in calving, from the heifer not having attained her proper size.

"It is evident from this that the bull should not be suffered to run with the young stock; and it is becoming more the practice, and often advantageously, to separate him from the cows altogether, except when in season. That which has been said of the best age for breeding the cow, will equally apply to the bull. It is absurd and dangerous to begin to use him as some have done when a yearling. He will come in season when two years old; he will be better at three; and although the farmer may not deem it prudent to keep him more than three years, he may then be sold advantageously, in his full prime, to another breeder."

The above extract is taken, *verbatim*, from the invaluable treatise on British cattle; the principles stated, are no doubt drawn from the extensive experience of English breeders. They are so totally at variance with the practice of most Kentucky breeders and farmers, that it may not be amiss to confirm them by the following extracts from Lawrence's Farmers and Graziers' Guide.

"These remarks apply with the greatest force to those inconsiderate persons who, anxious to anticipate their most sanguine hopes, injure their stock by putting their heifers prematurely to breed; and who, did they but en-

dure another season of necessary delay, would give time for nature to perfect the work of maturity, and insure a healthy offspring; but those persons, by an injudicious haste, destroy the stamina of the animal's constitution; entail a feeble and unhealthy issue, exhaust the powers of the devoted animal; and not only shorten her life, but occasion many and serious disorders.

"Heifers should not on any account be put to the bull before they have passed the second year of their existence; indeed, if three years be allowed, the much better condition of the calves will amply repay the one year's delay." R. W. S.

The Bloody Murrain.

Messrs. Editors.—On the morning of the 26th June, I discovered that the urine of one of my cows appeared to be very highly colored, and upon examination found it to consist principally of blood. In a short time she commenced trembling violently and fell, and appeared to be convulsed, after which she recovered enough to rise. Her discharges became more frequent, and gradually turned darker colored, until they became almost black, and in a few hours she died.

On the morning of the 4th of July I discovered another, and my last cow, in the same situation as the one I have mentioned, and upon examining the Cultivator, I found the disease to resemble the murrain, as described by Mr. Cookson in the Cultivator, Vol. 5, No. 5. There was a very slight discharge of blood from the bowels. I gave her tar as directed by Mr. Cookson, but it did not produce any good effect; she continued to linger, and on the following morning was much worse, being so stiff in her joints that it was with difficulty she could walk. I gave her another dose of tar, hoping it might relieve her, but she died in about two hours afterwards. Upon examining her intestines, I found her bladder to contain about two quarts of blood, her gall duct was very much distended, and contained a quantity of thick blackish matter; her horns were a little hollow. It may be proper to add, that we have had a disease among our cattle here during the winter and spring called the hollow horn, or horn distemper. Both of the cows that I lost were in fine order, having grazed alternately upon clover and salt marsh. Should you, or any of your numerous correspondents, know what this disease is called, you will greatly oblige a subscriber by publishing it, and the remedy also, if any is known, as I fear it will destroy my entire stock of cattle, it appearing to be the most fatal disease I have ever known. Wm. J. Wright.

Nansemond, Va. July, 1841.

Remarks.—The above are well characterised cases of bloody murrain, a disease which, as it appears in this country, would seem to be unknown in Europe, judging from the best works on cattle published there, such as Lawrence's Grazier's Guide, and Youatt on Cattle. The cause of the disease does not appear to be well understood, but the rapidity with which it reaches a fatal termination renders it one of the most formidable diseases the cattle-breeder can encounter. As is usual in the case of such diseases, there are a variety of cures, and as some of them may be useful, we give a few that have been communicated to us, adding our opinion that none of them can be relied on as a specfic, but that the safe course will be found in prevention rather than in the cure.

A correspondent of the Genessee Farmer, Vol. 6th, page 81, says that a decoction of the green leaves of mullin may be considered a certain cure. He took a quantity of the leaves of the mullin, steeped them in new milk, and gave three quarts of the tea to an ox dangerously sick, which produced an immediate cure; and a cow attacked by murrain was afterwards cured in the same way.

The Hon. Daniel Brady communicated the following, as a remedy practised with great success in western Pennsylvania. "Mix together half a pint of spirits of turpentine with a pint of sweet milk—put this compound into a bottle, and after shaking the bottle pour it moderately down the throat of the animal. Soon after this is done, give physic." Salts would doubtless answer as physic, and some discretion might be advisable in apportioning the dose to the size or age of the animal.

Mr. Priestman recommends half a pound of poke root washed clean, cut fine, and boiled in two quarts of water until it is reduced one half, then turn it down while warm. The dose to be repeated once a day till the cure is complete.

Mr. Sheldon, of Michigan, cured an ox violently attacked, by mixing half an ounce of copperas and half an ounce of alum, dissolving them in hot water, and while warm turn it down the animal. In 12 hours he was better, and a repetition of the dose cured him, though for a time weak from the great discharge of blood.

It is stated in the Franklin Farmer, that several cases yielded to two doses of sugar of one pound each, mixed with water. Some animals in the last stages have been cured by this simple remedy.

As we remarked before, however, we have more confidence in preventives than in cures. It is the opinion of the most intelligent men in districts where the disease is common, that it arises from bloodsuckers imbibed with stagnant waters, as these animals are most frequently found on dissection; but whether the opinion be correct or not, there can be no doubt the use of stagnant water must be injurious to the health of any animal and predispose it to disease. A farmer in Madison county, Ohio, after suffering many losses from murrain, became convinced the cause was in the water they drank, (bloodsuckers being abundant in it, and found in the cattle after death,) provided his stock with a supply of pure water, and in five years not a single animal had been attaked.

Next to pure water, a regular and constant supply of salt may be considered the best preventive of diseases in cattle, and if a quantity of ashes or lime is mixed with the salt, the effect will be still more beneficial. For proof of this we refer to the Cultivator, vol. 6th, pages 120 and 149. In the first case, Mr. Warner found that wood ashes given in equal quantities with salt, at the usual times of salting his stock, had for 20 years operated as an effectual preventive; and in the latter instance, Mr. Sackett, of Michigan, had for eight years secured his numerous stock of cattle, by keeping in their troughs, so that they always had access to it, a mixture of equal portions of slacked lime and salt. The lime was kept in a barrel in a dry place, air-slacked and always fit for use. Previous to adopting this course, he lost many annually by murrain, afterwards none. To conclude; pure water, and plenty of salt mixed with some alkali, ashes or lime, we consider the best remedies or rather preventives of the murrain.—*Cultivator.*

A New Disease prevalent among Horses.—Many horses in the city and in this vicinity have been afflicted for some time past with swellings in the legs and in the head. Farriers and Physicians tell us the disorder has not been known before in this country, though English books describe the symptoms of a similar affection of the limbs and the head. Bleeding and physicking have been practiced and we think with success, though many horses have died with the disorder. It seems to be contagious. —*Ploughman.*

Our Mode for Curing Beef or Pork.—We have already published the following receipt for curing Beef and Pork several times, but as we consider it the very best yet recommended, and as many of our present readers may not have seen it, we publish it again, that those who are fond of clean, pure, and sweet meat, without the apprehension of its tainting through the summer, may obtain their wish by adopting it. It is this:

To 1 gallon of water,
Take 1½ lb. salt,
½ lb. sugar,
½ oz. saltpetre.

In this ratio the pickle to be increased to any quantity desired.

Let these be boiled together until all the dirt from the salt and sugar, (which will not be a little) arises to the top and is skimmed off. Then throw it into a large tub to cool, and when *perfectly cold*, pour it over your beef or pork, to remain the usual time, say four or five weeks. The meat must be well covered with the pickle, and should not be put down for at least two days after killing, during which time it should be slightly sprinkled with powdered saltpetre.

Let this mode be once tried, and our word for it it will be tried again in preference to all others.—*Germantown Telegraph.*

We have seen a stalk, containing eight ears of corn, of a middling size, from the farm of Baruch Mullikin, Esq. near this village. The corn is of the Baden kind.

Marlbro' Gazette.

Living and Ornamental Fences.—At a recent meeting of the Botanical Society of London, Mr. D. Cooper gave an account of a new living fence, formed by planting young trees in a slanting position, every tree leaning the opposite way, so that they will cross each other, and then at the parts which come into contact, take off from each a piece of bark, and tie close together, covering the part with clay. This grafts each tree into its neighbor, and forms in a few years, a living fence, with diamond-shaped openings. The plan is an excellent one for ornamental fences.

FIFTEEN DAYS LATER FROM EUROPE.

The British Royal Mail Steamship Columbia arrived at Boston at about 12 o'clock on Tuesday, last week.

There was no material alleviation of the distress in the manufacturing districts—the contributions from other parts of the kingdom, through apparently liberal, being totally inadequate to meet the emergency of such a general want of productive employment.

The commercial depression which had prevailed so long in England, had spread over the whole of Europe. In Russia it was felt very severely. Not less than two hundred and fifty failures had taken place in Moscow alone, and nearly an equal number at St. Petersburg. The emperor is reported to have issued a peremtory ukase, to the effect that those insolvents who did not pay 40 per cent of their debts, should be compelled to join the army as common soldiers.

The failure of the potatoe crop in Ireland appeared to be even more extensive that it was at first represented; and, coupled with the but too apparent indications of a severe winter, caused many melancholy forebodings of distress among the countless poor of that oppressed and ill-governed country. The spread of the temperance reform, it was hoped would go far to mitigate the evels of scarcity, and to meliorate the condition of the suffering poor; but it could hardly atone for the great falling off of a crop which to Ireland is more important than all others combined.

Liverpool, 3d Dec. 1841.—The sales of Cotton for the week ending 19th ultimo, the day the last steamer sailed, were 19,810 bales, for the week ended 26th ultimo, there were 21,-810 bales; and for the week ended this evening they amount to 28,450 bales. At the close of last, and the early part of the present week, the market appeared more steady for the middling and fair qualities, but though sales were effected with more facility, no advance in price could be realized even in those descriptions, while good qualities hardly sustained their former value, and ordinary continued rather to decline.

Since the last American steamer arrived. 1st instant, there has been more Cotton pressing on the market, particularly of ordinary and good, which must both be considered 1 8sd lower than on the 16th ultimo, the date of our last circular, but the quotations for fair Upland is still 5 7-8, and fair Mobile 6d, while for fair Orleans it is reduced to 6 1-8d, which are all fully as high as are warranted. Of this week's business 4000 are Upland at 4¼a6¼; 13,800 Orleans at 4¼a7¼, with some prime parcels at 7¼ and 7¾, 3680 Alabama and Mobile at 4¼a7¼, and 40 Sea Island at 13a18d per lb. The greater depression in the ordinary qualities is to be ascribed to the increased supply and reduced value of Surat Cotton, fair of that class being down to 4¼a3¾d, which is forcing it much more into consumption as a substitute for the most inferior American, and as regards good and fine qualities they are unfavorably influenced by approaching supplies of the new crop, of which some has now arrived, hence middling qualities are most sealeable, but the week's business has closed with a steady market generally, and trade in the manufacturing districts is represented on all hands to be in a most unsatisfactory and gloomy state, and the consumption more or less curtailed by spinners working short time.

The imports of Cotton into Liverpool since 1st January is 1.096,000 bales, against 1.377,000 to same period last season;—the supply from the United States is 804,000 being a decrease of 340,000 bales. The stock in this port is about 450,000 bales, against 432,000 at same period last year—the stock of American is about 276,000, or 54,000 less than it then was. The supply of Surat is now large and the import into Great Britain for the present year is likely to prove about 300,000 bales, being an increase of 4,000 on the supply of the previous year.

The duty on Wheat is now 24s per quarter and on Flour 13s per bbl. below which it is not likely to go for at least several months. In the last fortnight Wheat and Flour have declined 8 to 10 per cent and these articles in bond are in a great measure nominal; the nearest quotation for Bonded Wheat is 7s per 70 lbs and Flour 28s per bbl. but the demand is totally suspended, and it is stated that some parcels of wheat just arrived from the South of Europe have been sold in London below the first cost abroad.

Turpentine is dull—the last sales were at 11s 3d for very inferior to 12s 2d per cwt for fair quality. No change in the Tobacco market since our last.

Havre Market.—At the Havre Cotton market, on the 27th ult., low and very ordinary qualities from the United States were in a considerable more request, and realized better pri-

ces than before. The transactions of Coffee consisted of 1,335 bags St. Domingo at 48¼f to 52¼f, and 52 bags Brazil fetched the same price. 135 hogsheads Martinique and Guadaloupe Sugar were contracted for, deliverable according, sold at 43f. Indigo met with purchasers at reduced rates, who took 21 seroons Caraccas 64f. 21 chests Bengal at 5f 9c to 5f 10c, and 27 do at the rate of 2f 55c below their former valuation.

BALTIMORE MARKET.

Cattle.—There were only about 250 head of Beef Cattle at the drove yards this morning, and the sales reach 60 head at $3,50 for inferior to $5 for good quality. The balance remain in the market unsold.

Flour.—Holders of Howard street Flour are asking $6 for good standard brands, but there is very little demand and no transastions have taken place. The wagon price is $5,87½.

We hear of no transactions in City Mills. The last sales were at $6,12½, but purchases could now be made for less.

No transactions in Susquehanna Flour.

Grain.—We hear of no sales of Wheat, and therefore quote nominally at $1,20a$1,30 for common to prime. No receipts of Pennsylvania Wheat.

We note sales of new Md. Corn to-day at 52 cents for white and 53 cents for yellow.

Sales of Md. Oats to day at 42a43 cents.

Provisions.—We note a sale of 30,000 lbs Old Western Sides Bacon to day at 3½ cts. Assorted of the same description is held at 4 cents; Hams at 4 to 7 cents and Shoulders at 3 to 3½ cents. In other descriptions of provisions we are not advised of any transactions. The last of New Mess Pork was at $11 cash. New Baltimore cured Mess Beef is held at $10 to $10,50; No. 1 at $8 to $8,50 and Prime at $6 to $6,50 New No. 1 Lard in kegs is held at 6½ to 7 cents and in barrels at 6 to 6½ cents. Western Butter is dull at 7 to 9 cents, and retail sales only of Glades are making at 10 to 20 cents as in quality.

Hogs.—Very few transactions have taken place in Live Hogs during the week, and these were confined to retail parcels. The market is fully supplied, but drovers demand $4,-50 to $5 per 100 lbs. and packers are refusing to buy at these rates. Some parcels have been slaughtered and salted on drovers' account. Killed Hogs have been brought in pretty freely during the week and sales of prime quality suitable for family use have been making at $4,50 to $4,75 in current funds.

Cotton.—The fair quotations for Georgia and S. Carolina Upland are about 10a10¼ cents; and for Mobile about 10¾a11 cents. There is however but little doing in the way of sales.

Cloverseed.—Sales have been made during the week to some extent principally at $7,25. Some small transactions have taken place at $7,50. We quote prime to day at $7,25.

Plaster.—Sales at $2,75 per ton, which is a decline.

Rice.—We quote fair to good quality at $3,62½a$3,75 per 100 lbs.

Sugars.—At auction on Tuesday, the cargo of schr. Nonpareil, consisting of 135 hhds. and 40 bbls. Porto Rico, was sold at $5,50a$7,05 for hhds. and $5,50 for bbls.

Tobacco.—There is not much doing in Maryland Tobacco, as shippers are not anxious to buy and only purchase such parcels as suit them for particular purposes. The stock is quite light. We continue former quotations, viz: Inferior and common Maryland at $3,50 a $4.50; middling to good $5 a $7, good $7,60 a $8 50; and fine $9 a $13. Ground leaves are actively inquired for, and sales are making of all that reach the market at $5 a $7 for common to good quality and at $7,-50 a $8 for extra. In Ohio we hear of but little doing, and we quote nominally as before, viz: Common to middling $4 a $6; good $5 a $6,50; fine red and wrappery $7 a $10; fine yellow $7,50 a $10; and extra wrappery $11 a $13. The inspections of the week comprise 232 hhds. Maryland, and 21 hhds. Ohio—total 253 hhds.

At *Richmond*, Dec. 23.—Cotton Yarns, Richmond and Manchester Factory, Nos from 4 to 20, command 20 to 28c; Flour $6a$6¼; Wheat $1,15a1,20; Corn, old 55c, New Orleans 25a20c; Plaster, last sales at 3½; Tobacco, but little doing, and no change in price.

At *Mobile*, Dec. 16.—Cotton—Quotations are advanced a little from last week in conformity with actual transactions; good fair brought 11c fair 9¾a10, middling 8¾a9, and ordinary 7¼a7¾c; week's receipts 10,175 bales, during the season 55,-738, exports 19.931 bales.

At *New Orleans*, Dec. 15.—Cotton—Demand light, to press sales a reduction would have to be submitted to; sales since 10th, 5,500 bales, including a list of middling at 8¼c per lb; the unfavorable accounts from the North have depressed the market. Sugar—But little done, not more than 300 hhds changed hands, the demand is only for prime, quotations 4¼a6c. Molasses in fair demand at 18a19c. Flour, arrivals free, superfine from store commands $6¼, fine $5¾, common $5, Pork, few sales, at $8¼ for Mess, $6¼ for prime

At *Charleston*, Dec. 22.—The Upland market has been in a depressed state for several days past, and the operations in all qualities under fair, which are in request, have been at unsettled prices, without, however, any positive decline on the rates of the previous week, which ruled from 6¼ to 9¾c per lb according to quality. Ric—The Rice market has been in a languid state since the date of our last; and holders generally have submitted to a slight reduction on the quotations of Saturday last.

At Alexandria, on Saturday, Flour was dull from stores at $5.87½, wagon price $5.75. Pork continued to advance, and prime quality for family use brought $4.75 from wagons; No change was noted in Wheat. Beef commanded $4a5. Hogs $4.50 few in market, and Sheep $1,50a$2.25; Butter, roll, 16 cents per lb; do. firkin 12; Lard 8; Cloverseed $7.

American Ladies National Magazine.

GODEY'S LADY'S BOOK FOR 1842.

The most splendid and valuable Magazine ever published.

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In announcing to his numerous patrons and the public at large his arrangements for the year 1842, the proprietor of Godey's Lady's Book takes occasion to acknowledge the unparalleled and triumphant success of his Magazine, which has now reached the extraordinary number of 40,000 Copies Monthly, being a larger edition than has ever been printed of any other work, of any description, in America. This success he is aware has been attained by the vast superiority which the Lady's Book has always maintained over the various contemporary Magazines which have attempted to rival its merits, a superiority which he is still determined to preserve, by keeping it, in all its departments, Literary, Intellectual and Moral, as well as Pictorial, Emblematic, Artistic, and Mechanical.

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Entering, as he is about to do, on the 24th volume of the Lady's Book with increased energy and accumulated resources; with an ample knowledge of the business in which he is engaged, acquired by long years of unremitted application; with a subscription list unparalleled in the annals of literature; with numerous facilities not possessed by any other publisher; with well-digested and wide extended arrangements; and above all, with a steadfast purpose of maintaining the lofty elevation his work has reached, the proprietor has not hesitated to incur expenses which under other circumstances might well prove startling; but by means of which he will be enabled to make the Lady's Book the richest, the rarest, the most attractive, and the most valuable periodical, intrinsically and extrinsically, ever offered to the public.

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He will be enabled to furnish occasional articles from Maria Edgeworth, Mary Russel Mitford, Mrs. Cornwell Baron Wilson, Mrs. S. C. Hall, Mrs. Hofland, Mary Howit, and all other English lady-writers of distinction, some of whom have already published in the Lady's Book the first original contribututions they have ever made to American Literature.

Nor has he omitted to procure the services of eminent writers of the opposite sex. Aware of the universal and well-deserved popularity of N. P. Willis, Esq. and confident that the productions of his graceful and eloquent pen will be highly acceptable to the readers of the Lady's Book, the proprietor has entered into an arrangement by which he will be able to give in each number of the work, an exclusive article from that gentleman; and he has also retained all the contributors whose writings have heretofore given such general satisfaction, including W. G. Simms, Esq., Professor Ingrahame, Professor Dimitry, Professor Frost, Professor Walter, Park Benjamin, Esq; R. S. Mackenzie, L. L. D., T. S. Arthur, Esq. H. W. Herbert, Joseph C. Neal, Hon. Robert T. Conard, Dr. J. K Mitchell, Epes Sargent, G. P. Morris, Joseph R. Chandler, Robert Morris, P. Earle, M. D., N. C. Brooks, A. M., E. Holden, A. M'Makin, L. F. Tasistro, Rufus Dawes, E. D. Squier, J. M'Lellan, Jr., James Aldrich.

With such aid it is not too much to say, the Literary Department of the Lady's Book will surpass any thing that has ever been or can be attempted.

ORNAMENTAL DEPARTMENT.—It is a source of no little pride to the proprietor of the Lady's Book, that he first introduced into this country the plan of furnishing, along with a monthly periodical of elegant literature, embellishments of an attractive and costly character. The first steel engravings accompanying such a work were given by him; the first mezzotint engraving was given by him; the first patterns of lace work and embroidery were given by him; the first colored plates of Fashions were given by him; the first music was given by him. These are things to which he would not refer, if some of those who have essayed to follow in his footsteps, not content with imitating all he designs, even to the form of his book, the size of his type, and the colour of his cover, had not foolishly put forward claims to originality, and attempted to found a right to an exclusive merit on doing that which they had borrowed from his example. But what he has done heretofore in the way of embellishment to his book, though it far exceeded any effort of those who strove to copy his movements, cannot compare with that he now means to do. His arrangements for this department of his work have been projected on the most liberal scale of expenditure, involving such an extent of outlay as has never before been dreamed of in any periodical, European or American. As an evidence of his intentions, he now states that each number of the Lady's Book for the ensuing year, will contain, at least—THREE SPLENDID ENGRAVINGS: embracing in the series every possible variety of subject, Historical, Landscape, Picturesque, Portraiture, Imaginative, Emblematical, and executed in the every possible variety of the art; Mezzotint, Line and Mezzotint, Stipple, Medallion, and that most chaste and expressive manner, the Line and Dot combined, which has given such world-wide celebrity to the works of modern artists.

The American Guide Plates of Fashions, coloured, will be given every month.

In order to give the greatest attractiveness to the subjects of his embellishments, the proprietor has given orders to various American Painters, of established reputation, who are now engaged in preparing expressly for the Lady's Book, numerous Original Pictures, on National and Historical events, some of which are nearly completed, and will soon be in the hands of the engraver. Among the painters thus engaged, he may enumerate—J. G. Chapman, Painter of the National Picture of the Baptism of Pocohontas, P. F. Rothermel, J. P. Frankenstein, S. S. Osgood, of Boston, I. Williams, &c. &c.—He has also established a correspondence, in London, through which he will receive early proof impressions of the finest prints executed in that metropolis, and will thus be constantly supplied with an immense variety, from which to make suitable selections. In addition to this, he will receive the only copies of the celebrated prize Engravings of the Edinburg Apollo Gallery, sent to this country; one of which, the Examination of Shakspeare before Sir Thomas Lucy, he has already given to his patrons, and another of which, The Stray Children, he has now in preparation, as well as a series of Pictorial Illustrations of Shakspeare.

Determined to satisfy every variety of taste, the proprietor has also made arrangements for a series of the most superb Mezzotints ever executed in this country, several of which are already engraved, and will be given to his subscribers as soon as a sufficient number of impressions can be taken to supply his immense edition. Besides the services of H. S. SADD, of New York, who has now in hand a number of plates, the proprietor has secured the invaluable aid of Mr. HUMPHREYS, of London, who is universally conceded to stand in the foremost rank of English Engravers, and whose splendid efforts in Mezzatint have commanded the admiration of the most distinguished amateurs and critics. This eminent artist is now engaged in preparing, expressly for the Lady's Book, a number of Mezzotint Pictures, which the proprietor pledges himself will be of an unsurpassed excellence; and of the most interesting and attractive subjects. To guard against all possibility of difficulty hereafter, he has likewise ordered from England a Complete Mezzotint Establishment, and immediately on its arrival, Mr. Wm. E. Tucker, of this city, will commence operations in that department of art.

In order to procure the various embellishments in season, the proprietor has made permanent arrangements with the following eminent engravers, all of whom are now engaged in executing steel plates for the Lady's Book.—*New York*, A. L. Dick, N. Gimbrede, W. H. Jackman, J. G. Dunnel, A. Jones.—*Philadelphia*, W. E. Tucker, J. B. Neagle, J. B. Forrest, W. H. Ellis, E. Humphreys.

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A MACHINE for boring holes in the ground for posts, price $5

A MACHINE for mortising posts, sharpening rails for fence, for sawing wood in the forests, and planing boards, &c. 150

A HORSE POWER on the plan of the original stationary power; the castings of this machine weigh 850 lbs. 130

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A MACHINE for PLANTING COTTON, CORN, BEETS, RUTA BAGA, CARROTS, TURNIPS, onions, and all kinds of garden seeds—a most valuable machine. 25

Also, CORN & COB CRUSHERS, Mortising & Planing machines, Tenoning do.; Gear Drill Stocks, Ratchet Drills, Screw Setters, Turning Lathes and Circular Saw Arbors, and benches for the same, &c.; and Cutting and cleaning Chissels for mortising machines. GEO. PAGE,

MURRAY'S CORN & COB CRUSHERS.

The subscriber, who exhibited the Corn and Cob Crusher and Grinder at the Agricultural meeting at Govanstown, continues to build them, and has so improved them that persons who have not got horse powers, can use them by hand power, with sufficient facility to supply the wants of small farms, and with one or two horse power can do more work, he believes, than any other machine for the same purpose that will require double the power, as will soon be made manifest. The price of the crusher is $35, or $38 with an extra set of grinders.

He is also prepared to build portable HORSE POWERS of the very simplest and best construction, in every respect best suited for farmers; in place of using cast iron wheels, he uses leather belts, which the farmer can keep in repair himself. It is now well tested that belts are as well adapted to driving machinery as cast iron wheels. The price of the horse power is $50.

☞Orders for the above machines can be left with Mr. SAML. SANDS, at the office of the American Farmer, or with the subcriber, WM. MURRAY, Powhatan Factory.

de 1 Baltimore county.

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1 very fine Durham Bull, 5 years old, pure white, out of imported and excellent milking stock, the dam and sire cost $1000; the present owner having disposed of his other cattle, has no use for him and will sell him low; he is very docile, large, and well formed, and in all respects a very superior animal.

Also, a Durham Bull, 18 months old, well grown animal, from stock imported by Hare Powell—he will be sold very low.

Also 2 fine young DEVON BULLS, last spring's calves, handsome well grown animals, and 3 HEIFERS, of same breed and age; these animals would be an acquisition to any gentleman of the South, and will be sold deliverable in Charleston, Savannah, Mobile or New Orleans, free of all expense and risk to the purchaser, at $140 per pair.

Also a beautiful half Durham & half Devon Heifer, 1 year old in Sept.—and a full blood Devon Heifer of same age; these are very handsome animals, and will be delivered at either of the above ports free of risk and charges at $85 each; they would be put to a Durham or Devon bull if preferred.

Also, 2 very fine New Leicester (or Bakewell) RAMS, one 4, the other 2 years old—and 3 Rams and 6 Ewes, of the same breed. last spring's lambs, the latter will be delivered at either of the above mentioned ports at $60 for a ram and 2 ewes—they were raised by Mr. Bevans, on the Hon. Richard Caton's estate. Either of the older rams will be sold for $40, or $50 if delivered as above.

Also, SOUTH-DOWNS at same prices—and BERKSHIRE Pigs $20 a pair, 2 to 3 months old, box and feed extra if shipped.

S. SANDS,

de 15 office of the American Farmer.

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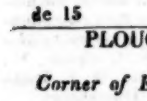
J. S. EASTMAN, in Pratt near Hanover street, has on hand the real Waldron Grain and Grass Scythes; also American Grass Scythes that are warranted, and returnable if not good; superior Pennsylvania made Grain Cradles; a prime lot of Grass Sneeds at wholesale or retail; 400 Connecticut made Hay Rakes, equal to any ever offered in this market, at wholesale or retail; a prime article of cast-steel hay and Manure Forks, also Hoes for garden use—and Elwell's best English made field Hoes, together with a general assortment of Agricultural Implements, such as Ploughs of all kinds. Harrows, Cultivators for Corn and Tobacco. Wheat Fans, at various prices, a superior article; Horse-power Threshing Machines—Farm Carts, with lime spreading machinery attached—a large quantity of Plough Castings constantly on hand, for sale at retail or by the ton—Machine Castings and machinery, made in the best manner and at short notice—likewise repairs, &c. &c. On hand several different Corn Planters, that have a good reputation.

N. B. Always on hand, Landreth's superior Garden Seeds, at retail. au 1 J. S. EASTMAN.

MARTINEAU'S IRON HORSE-POWER.



The above cut represents this horse-power, for which the subscriber is proprietor of the patent-right for Maryland, Delaware, and the Eastern Shore of Virginia; and he would most respectfully urge upon those wishing to obtain a horse power, to examine this before purchasing elsewhere; for beauty, compactness and durability it has never been surpassed.

Threshing Machines, Wheat Fans, Cultivators, Harrows and the common hand Corn Sheller constantly on hand, and for sale at the lowest prices.

Agricultural Implements of any peculiar model made to order at the shortest notice.

Castings for all kinds of ploughs, constantly on hand by the pound or ton. A liberal discount will be made to country merchants who purchase to sell again.

Mr. Hussey manufactures his reaping machines at this establishment R. S. CHENOWETH,

corner of Front & Ploughman sts. near Baltimore st. Bridge, or No. 20, Pratt street. Baltimore, mar 31, 1841

THE LIME KILNS.

The subscriber, in order to meet the increasing demand for Lime for agricultural purposes, has established Kilns for burning the same on the Rock Point farm, belonging to the Messrs. Lancaster, in Charles county, Md where he is ready to supply all demands for this section of the state, and the waters of the Potomac, on accommodating terms. Orders directed to him at Milton Hill Post Office, Md. will meet prompt attention.

de 7 6m* WM. M. DOWNING.

MOTT'S AGRICULTURAL FURNACE.

The subscriber respectfully informs his customers, and the public generally, that he has on hand, and intends constantly to keep, a supply, of MOTT'S JUSTLY CELEBRATED AGRICULTURAL FURNACES, for cooking vegetables and grain for stock of all kinds. They vary in size from HALF a barrel to FOUR barrels, and are better adapted to the purpose for which they are intended than any other yet invented; obtained the premium of the American Institute, and have given satisfaction to every gentleman by whom they have been purchasedr. Col. C. N. BEMENT, the distinguished agriculturist near Albany, New York, who has had one in use for some time, in a letter to the editor of the Cultivator, says:

"The one I purchased last fall, I continued to use during the winter, and have found no reason to alter the opinion then expressed; but on the contrary, I am more confirmed, and do not hesitate, without qualification, to recommend it, with the late improvements, as superior to any thing, for the purpose intended, which I have ever used, or which has fallen under my observation."

"Mr. Mott has lately sent me one of the capacity of two barrels, containing the improvements, which consist in casting "points of attachment" or gudgeons, on the rim or sides of the kettle, so that with a crane or level" it may be raised out of the casing and the contents emptied out, and to facilitate which, a loop or eye is cast on the bottom of the kettle so that it can be done without burning the fingers. The flange also, has been extended beyond the edge of the casing, so that if water boil over it will not run down the flues and put out the fire"

These furnaces and boilers are portable and may be set up in any out-house, being from their compactness and construction perfectly safe. The furnaces are made of cast iron and peculiarly calculated to economise fuel.

The following are the prices for one of the capacity of a half barrel $12,50

do	do	do	One barrel	20,00
do	do	do	One and a half	24,00
do	do	do	Two barrels	28,00
do	do	do	Three do	38,00
do	do	do	Four do	48,00

A. WILLIAMS, Corner of Light & Pratt St. Balt. Md.

de 15 tf

HALF DURHAM BULL.

For sale, a bull sired by Mr. Beltzhoover's imported Durham bull, and out of a celebrated butter cow, believed to be part Alderney, and which gave 23 quarts of milk per day for several months after producing him. He is about 20 months old, of good size, and form. Price $25. Apply to S. SANDS.

BERKSHIRE PIGS.

The subscriber will receive orders for his fall litters of pure Berkshire Pigs bred from stock selected of C. N. Bement & John Lossing, esqs. of Albany, N.Y. and importations from England—Price, same as at Albany for pure Berkshire $20 per pair; for Irish Graziers $20 per pair, with the addition of $1 for Cage, deliverable in or shipped at the port of Baltimore.

Address, post paid. JOHN F. E. STANLEY,

on 24 Or apply at No. 50 S. Calvert street, Baltimore

JOHN T. DURDING, *Agricultural Implement Manufacturer, Grant and Ellicott street near Pratt st. in the rear of Messrs Dinsmore & Kyle's, Baltimore,*

Anxious to render satisfaction to his friends and the public, has prepared a stock of Implements in his line, manufactured by experienced workmen, with materials selected with care; among them.

Rice's Improved Wheat Fan, said to be the best in use, and highly approved of at the recent Fair at Ellicott's Mills,	$25
Straw Cutters, from	$5 to 20
Corn Shellers, hand or horse power,	13 to 25
Thrashing Machines with horse powers, warranted, and well attended in putting up,	$150

Corn and Cob Mills, new pattern.

The Wiley Plough, Beach's do. Chenoweth's do, New York do, self sharpening do hill-side do of 2 sizes, left hand Ploughs of various sizes, Harrows, hinge or plain; Cultivators, expanding or plain, 4 sizes; Wheat Cradles, Grass Scythes hung, &c.

☞Castings for machinery or ploughs, wholesale or retail; Haines' Singletrees, and a general assortment of Tools for farm or garden purposes, all of which will be sold on the most pleasing terms to suit purchasers. oc 14

IMPORTED JACKS, JENNY, BROAD-TAILED AND OTHER SHEEP, BLOODED COLTS.

The subscriber is authorised to sell TWO JACKS and a JENNY. The Jacks are of the largest size, from the Island of Majorca, *sure foal getters*, and were selected in person and imported by the present owner; the Jennet is 5 years old, full 60 inches, has bred two colts in the two last years, and is now with foal to the largest Jack.

Also, Broad-tailed, full South-Down, Bakewell & Merino Sheep. The Ewes of which are with lamb to the Broad tail.

Also, the Berkshire, Andelusian, Bedford, and the large Chester county Hog, with 7 fine blooded Colts and Fillies.

PIGS FOR SALE.

For sale, 3 pair 3-4 Berkshire & 1-4 Irish Grazier, near 3 months old. Also full bred black Berkshires. S. SANDS.

GREAT IMPROVEMENTS.

HUSSEY'S REAPING MACHINE—CORN-SHELLER AND HUSKER—CORN & COB CRUSHER & GRINDER.

A great improvement has been made by the subscriber in the Reaping Machine since last year; the cog-wheel machines now making for 1842, will combine all the material advantages of both the cog wheel and cam wheel machines as made last year. By means of these improvements, the machine is made capable of cutting 6 feet in width with the same facility that it cut 5 feet last year—their durability is also greatly increased. The cam wheel and lever machines will also be made for those who choose them; they are also much improved. An experimental machine of each kind was prepared and used in the last harvest, by which the improvements now offered were fully tested. Both machines are warranted *bona fide*—price $150.

The *Corn Sheller and Husker* is warranted to shell 100 bushels per hour with proper management and moderate exertion. A gentleman of the highest respectability in Washington county, Md. assures me that he shelled 590 bushels in 3½ hours with one of these machines. It is also warranted to shell and husk at the same operation as fast as two men can put in the corn by handfuls of 6 ears at a time—when the corn is poured from a basket, the husk or shuck will in some degree impede its entrance; it is for this reason that husked corn will shell so much more rapidly. This machine has recently been much improved by the subscriber. It can be driven by any ordinary horse-power—price $30.

The *Corn and Cob Crusher and Grinder* is a late improvement by the subscriber, a new arrangement—in the first hour when it ever run, which was on the 22d inst. it crushed and ground from corn in the ear 8 1-2 bushels—the gentleman on whose place it was tried, a few miles from the city, expresses his satisfaction with the quality of its work. The mill is strong and simple, and compactly arranged, occupying about 3 feet by 2 on the floor, and containing a convenient meal box directly below the grinders. It can be driven by any horse power suited for thrashing wheat—price $40 including an extra set of grinders, which can be put in by any intelligent farmer.

Orders may be directed to me in Baltimore by those who wish to procure the above machines.

Those who design getting Reaping Machines for the harvest of 1842, will please give me early notice, designating the kind they choose, whether the cog wheel and crank, or the cam wheel and lever. To those who do not make the selection themselves I shall invariably send those which I have the most confidence in myself, without regard to any difference in first cost.

In expressing my thanks to farmers and others for their very liberal patronage thus far bestowed upon me, I can assure them that no exertion shall be wanting on my part to render the machines now offered to them as perfect as possible, and well suited to the purpose for which they are designed, for which the experience I have had may perhaps be some guarantee.

Baltimore, Oct. 25, 1841. tf OBED HUSSEY.

AGRICULTURAL MACHINERY.

For sale by ROBERT SINCLAIR Jr. & CO. No. 60 Light Street.

Goldsborough's Cornsheller & Husking Machine—warranted to husk & shell 900 bus. of corn per day, or shell in strip'd state 1200 bushels	$45 00
Do. for manual power which performs at about half the rate as above	35,00
Do for Husking & Shelling Corn and Thrashing Grain, all of which is done perfectly and with astonishing despatch,	60 00
Horse Powers adapted to the draft of 2 or more horses, made very simple and strong,	100a125
Spike Threshing Machines, warranted to be equal to any in this country,	50 to 75
Straw Carriers for separating straw from the grain when threshing,	20 to 25
Patent Hay and Tobacco Presses, very simply constructed and great power,	125
Knowles' patent Grain and Grass Cutting machines,	150
Vegetable Cutters, warranted to cut 1000 bushels turnips, beets, &c. per day,	20
Grindstones, hung on friction rollers,	15
Centrifugal Disseminators for spreading lime, ashes, &c.	30
Baldwin's patent Corn and Cob Crusher,	65
Cylindrical Straw Cutters for manual or horse power, a first rate article,	30a45a75
Fanning Mills,	25a30
25 sorts Ploughs, embracing the sub-soil, hill side, paring and every other useful variety,	3a15
Cultivators for Tobacco and Corn, made to expand and stationary,	5a6.50
Harrows, hinge, V shape, common drag and improved Eng.	7a25
Drill and sowing Machines,	12a25
Ox Yokes, Swingle Trees, Hoes, and every other variety of Agricultural Tool	
GARDEN & FIELD SEEDS, embracing a very large and genuine assortment	
Books on cultivation and management of Stock	
TREES and PLANTS supplied at the shortest notice.	

*** Catalogues of the above supplied gratis, giving prices and description of each article for sale. se 29

LIME—LIME.

The subscribers are prepared to furnish any quantity of Oyster Shell or Stone Lime of a very superior quality at short notice at their Kilns at Spring Garden, near the foot of Eutaw street, Baltimore, and upon as good terms as can be had at any other establishment in the State.

They invite the attention of farmers and those interested in the use of the article, and would be pleased to communicate any information either verbally or by letter. The Kilns being situated immediately upon the water, vessels can be loaded very expeditiously. N.B. Wood received in payment at market price.

ap. 22 3m E. J. COOPER & Co.